

CLAIMS

1. A method of compensating for residual aligning torque in a pneumatic tire having a circumferentially extending tread pattern with at least first and second circumferentially extending ribs, each rib being located on an opposite side of a mid-circumferential plane of said tire, including the steps of:

- a) forming each rib of a plurality of tread blocks;
- b) providing certain of the tread blocks in each of said ribs with a plurality of angled sipes;
- c) forming the sipes in the first rib at an angle of between 2 and 15 with respect to a radial plane passing through an axis of rotation of the tire; and
- d) forming the sipes in the second rib at an angle with respect to said radial plane slanted in a substantially equal but opposite direction to the angle of the sipes in the tread blocks in the first rib.

2. The method defined in claim 1 including the step of forming the angles of the sipes at generally 7.

3. The method defined in claim 1 in the step of forming the sipes with a depth of between 20% and 100% of the height of the tread blocks.

4. The method defined in claim 1 including the step of forming the sipes substantially perpendicular to the mid-circumferential plane of the tire.

5. The method defined in claim 1 including the step of forming the sipes at an angle with respect to the mid-circumferential plane of the tire.

6. The method defined in claim 1 including the step of forming the sipes with a width of between 0.015 inches and 0.06 inches.

7. The method defined in claim 6 including the step of forming the sipes with a width of approximately 0.03 inches.

8. The method defined in claim 1 including the step of forming the sipes with a zig-zag pattern.

9. The method defined in claim 1 in the step of forming the sipes in opposed shoulder ribs of tire.

10. The method defined in claim 1 including the step of forming the sipes in opposed intermediate ribs.

11. The method defined in claim 1 including the step of forming the sipes only partially across the lateral width of the tread blocks.

12. A method of compensating for residual aligning torque in a pneumatic tire having a circumferentially extending tread pattern with first and second circumferentially extending ribs, each rib being located on an opposite side of a mid-circumferential plane of said tire, including the steps of:

- a) forming each rib of a plurality of tread blocks;
- b) providing certain of the tread blocks in each of said ribs with a plurality of angled sipes;
- c) forming the sipes in the first rib at an angle of between 2 and 15 with the respect to a radial plane passing through the axis of rotation of the tire and with said sipes having a depth of between 20% and 100% of the tread block height, and providing said sipes with a width of between 0.015 inches and 0.06 inches; and
- d) forming the sipes in the second rib at an angle with respect to said radial plane slanted in a substantially equal but opposite direction to the angle of the sipes in the first rib, and with a depth and width within the ranges of said sipes in said first rib.

13. The method defined in claim 12 including the step of forming each of the sipes at an angle of approximately 7 and a width of approximately 0.03 inches.

14. The method defined in claim 12 including the step of forming the sipes in a pair of shoulder ribs.

15. The method defined in claim 12 including the step of forming the sipes in a pair of opposed intermediate ribs.

5 16. A method of compensating for residual aligning torque in a pneumatic tire having a circumferentially extending tread pattern with at least first and second circumferentially extending ribs, each rib being located on an opposite side of a mid-circumferential plane of said tire, including the steps of:

a) forming each rib of a plurality of tread blocks;

10 b) providing certain of the tread blocks in each of said ribs with a plurality of angled sipes;

c) forming the sipes in the first rib at an acute angle with the respect to a radial plane passing through the axis of rotation, and with a width of between 0.015 and 0.06 inches; and

15 d) forming the sipes in the second rib at an angle with respect to said radial plane slanted in a substantially equal but opposite direction to the angle of the sipes in the tread blocks in the first rib, and with a width within the range of said sipes in said first rib.

20 17. The method defined in claim 16 including the step of providing a substantially laterally extending groove between the tread blocks of the first and second ribs.

18. The method defined in claim 17 including the step of providing the laterally extending groove with a generally V-shaped configuration.

11/03/2014 10:00:00 AM